# TWO REMARKABLE NOVELTIES OF AGERATINA (ASTERACEAE, EUPATORIEAE) FROM MEXICO

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# **ABSTRACT**

Two new Mexican species of Ageratina are described and illustrated: A. jalpana B.L. Turner, from southernmost Zacatecas, and A. josepaneroi B.L. Turner from Guerrero. Both belong to the subgenus Neogreenella, and both appear to have no close relatives in that group. Ageratina jalpana is remarkable because of its somewhat graduate, relatively broad involucral bracts; A. josepaneroi for its cylindrical drooping heads.

KEY WORDS: Asteraceae, Eupatorieae, Ageratina, México, systematics

Ageratina is one of the largest genera of Mexican comps, containing ca. 140 species (Turner 1997) with more coming to light almost monthly, some of these remarkably distinct, as attested to by the following novelties.

AGERATINA JALPANA B.L. Turner, spec. nov., Figure 1. TYPE: MEXICO. Zacatecas: Ridge with Quercus and Pinus, 32 km W of Mexican Hwy 41 just S of Jalapa along road to Tlaltenango, 2375 m, 8 Sep 1986, D.E. Breedlove 63992, with B. Anderson (HOLOTYPE: CAS!; Isotype: TEX).

Similis A. venulosae (A. Gray) King & H. Rob. sed foliis majoribus, paene sessilibus et involucris multo majoribus cum bracteis 3-seriatis impricatisque, 1.0-1.5 mm latis (vice bractearum 2-seriatarum, subaequalium, minus quam 1 mm latarum).

Stiffly erect suffruticose herbs to ca. 1 m high (est.). Stems puberulent with upwardly appressed hairs. Leaves opposite throughout, gradually reduced upwards, the larger leaves 6-8 cm long, 3.5-4.5 cm wide; petioles 1-2 mm long; blades broadly ovate, 3-5 nervate from the base, glabrous or nearly so, the margins serrate. Heads arranged in terminal rounded clusters, the entire aggregation 8-10 cm across, 3-6 cm high, the ultimate peduncles 2-5 mm long. Involucres 3-seriate, 4.5-5.5 mm high, the outer series of bracts 1/2-2/3 as long as the inner series, the latter purplish, ca. 1.5 mm

wide, their apices obtuse or somewhat rounded. Receptacle glabrous. Florets ca. 8 per head. Corollas white, ca. 5 mm long, glabrous throughout, the throat as long as the weakly ampliate limb or nearly so. Achenes blackish, 5-nervate, ca. 2.2 mm long, sparsely hispid along the angles; pappus of 20-25 persistent dirty-white bristles 5-6 mm long.

This taxon clearly belongs to the subgenus *Neogreenella* but has no unequivocal relatives among species of that taxon in that it possesses very peculiar 3-seriate, subimbricate, relatively broad involucral bracts. Vegetatively it is quite similar to *Ageratina venulosa*, to which it is compared in the diagnosis, in that the leaves are nearly similar in shape and texture, both having markedly reticulate-venose leaves above and below.

AGERATINA JOSEPANEROI B.L. Turner, spec. nov. Figure 2. TYPE: MEXICO. Guerrero: Chilpancingo, km 8 de la carretera Chilpancingo-Chichihualco (17° 37′ 09.2″ N, 99° 34′ 04.8″ W), selva baja caducifolia, 800 m, José L. Panero y Curtis C. Clevinger 6183 (HOLOTYPE: MEXU!; Isotypes: TEX!, to be distributed).

Herbae graciles, 50-100 cm altae, caulibus simplicibus et pubescentibus. Folia opposita ubique, redacta gradatim sursim, 10-18 cm longa et 6-9 cm lata ad medicaulem; petioli 6-8 cm longi, pubescentes; laminae subcordatae-cordatae, tri-nervatae e basi, glabrae aut paene glabrae. Capitula 2-8 in gregibus terminalibus, plus minusve pendulis, 8-12 mm longis. Involucra paene teretia, 8-9 mm alta; bracteae 3-seriatae, 1-3 mm longae, extimis linearibus. Flosculi 7-10 in omnibus capitulis. Achenia brunnea, ca. 3.5 mm longa, ciliata secus cristis; pappus setae (ca. 25) rigide erectae, 5 mm longae, dispositae in serie singulari.

Slender simple-stemmed perennial herbs 50-100 cm high arising from fibrous roots. Midstems with elongate submaculate internodes, minutely puberulent, the vestiture ca. 0.2 mm high. Leaves opposite throughout, gradually reduced upwards, those at midstem 10-18 cm long, 6-9 cm wide; petioles 6-8 cm long, pubescent like the stems; blades subcordate to cordate, 3-nervate from the base, glabrous or nearly so, surfaces without glandular punctations, the margins crenulate. Heads arranged in terminal, 2-8 headed aggregations, each of the latter more or less drooping or pendulous, the ultimate peduncles puberulent, 8-12 mm long. Involucres nearly terete, 8-9 mm high; bracts 3-seriate, the outermost linear, 1-3 mm long, the inner series linear-lanceolate, (1-)2-nervate, glabrous. Receptacle plane, glabrous. Florets 7-10 per head; corollas white, tubular, gradually narrowed upwards, the tube indistinct, mostly ca. 6 mm long, 1 mm wide, glabrous throughout, the inner lobes smooth, ca. 1 mm long. Anther appendages ca. 0.25 mm long and as wide, their apices rounded. Achenes brown, ca. 3.5 mm long, ciliate along its ridges; pappus of ca. 25 stiffly erect bristles 5 mm long arranged in a single series.

This is a remarkably distinct and beautiful species instantly recognized by its diffuse drooping cylindrical heads, each possessing 7-10 florets. It belongs to

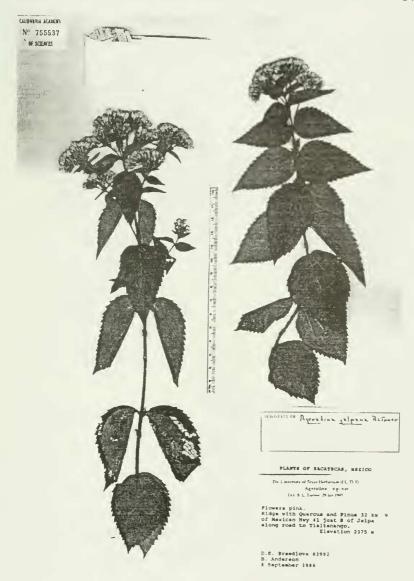


Figure 1. Ageratina jalpana, holotype.



Figure 2. Ageratina josepaneroi, isotype.

subgenus Neogreenella and will key to Ageratina grashoffii B.L. Turner in my recently published treatment of Ageratina for the Comps of Mexico (Turner 1997), which it does not remotely resemble.

The apellation honors my colleague, Prof. José Panero, an equally remarkable individual well known for his scholarly work on comps generally, hence the full name for this particular eponym.

# **ACKNOWLEDGMENTS**

I am grateful to Gayle Turner for the Latin diagnosis, and to her and Ted Delevoryas for reviewing the manuscript.

# LITERATURE CITED

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